

Product Specifications For 966



Engine

**Engine Power @
1,600 rpm - ISO
14396:2002** 321 HP

**Gross Power @
1,600 rpm - SAE
J1995:2014** 325 HP

Engine Model Cat C9.3B

**Net Power @ 1,600
rpm - ISO 9249:2007,
SAE J1349:2011** 303 HP

Note (1) Cat engine meets U.S. EPA Tier 4 Final, EU Stage V, Korea Stage V, China Nonroad Stage IV and Japan 2014 emission standards.

Note (2) The net power advertised is the power available at the flywheel when the engine is equipped with fan, alternator, air cleaner, and aftertreatment.

**Net Torque @ 1,200
rpm - ISO 9249:2007,
SAE J1349:2011** 1255 ft-lb

**Engine Torque @
1,200 rpm – ISO
14396:2002** 1313 lb/ft

**Gross Torque @
1,200 rpm – SAE
J1995:2014** 1327 lb/ft

Note (3)

Cat diesel engines are required to use ULSD (ultra-low sulfur diesel fuel with 15 ppm of sulfur or less) or ULSD blended with the following lower-carbon intensity fuels up to: • 20% biodiesel FAME (fatty acid methyl ester)* • 100% renewable diesel, HVO (hydrogenated vegetable oil) and GTL (gas-to- liquid) fuels Refer to guidelines for successful application. Please consult your Cat dealer or “Caterpillar Machine Fluids Recommendations” (SEBU6250) for details. * Engines with no aftertreatment devices can use higher blends, up to 100% biodiesel.

Displacement 9.3 L

Weights

Operating Weight 51124 lb

Note Weight based on a machine configuration with Bridgestone 29.5R25 VSNT L4 radial tires, full fluids, operator, standard counterweight, ride control cold start, roading fenders, Product Link, open differential axles (front/rear), secondary steering, sound suppression, and a 5.4 m³ (7.1 yd³) general purpose bucket with BOCE.

Transmission

Forward - 1 4.2 mile/h

Forward - 2 8.4 mile/h

Forward - 3 15 mile/h

Forward - 4 24.5 mile/h

Note Maximum travel speed in standard vehicle with empty bucket and standard L3 tires with 849 mm (33 in) roll radius.

Reverse - 1 4.5 mile/h

Reverse - 2 9.2 mile/h

Reverse - 3 16.5 mile/h

Reverse - 4 24.5 mile/h

Sound

Note (1)	** For machines in European Union countries and in countries that adopt the EU Directives.
Note (2)	***European Union Directive 2000/14/EC as amended by 2005/88/EC.
With Cooling Fan Speed at 70% of Maximum Value - Exterior Sound Power Level*	108
With Cooling Fan Speed at 70% of Maximum Value - Operator Sound Pressure Level (ISO 6396:2008)	69 dB(A)
With Cooling Fan Speed at Maximum Speed - Exterior Sound Power Level (ISO 6395:2008)	109 dB(A)
With Cooling Fan Speed at Maximum Speed - Exterior Sound Pressure Level (SAE J88:2013)	76
With Cooling Fan Speed at Maximum Speed - Operator Sound Pressure Level (ISO 6396:2008)	70 dB(A)
With Cooling Fan Speed at Maximum Value - Note	Distance of 15 m (49.2 ft), moving forward in second gear ratio.

Air Conditioning System

Air Conditioning The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.6 kg (3.5 lb) of refrigerant which has a CO2 equivalent 2.288 metric tonnes (2.522 tons).

Operating Specifications

Breakout Force	38999 lb
Note (1)	For a machine configuration as defined under Weight.
Note (2)	Full compliance to ISO 14397-1:2007 Sections 1 thru 6, which requires 2% verification between calculations and testing.

Static Tipping Load - Full 40° Turn - No Tire Deflection	15981 kg
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Static Tipping Load - Full 40° Turn - With Tire Deflection	32727 lb
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Service Refill Capacities

Cooling System	17.4 gal (US)
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Crankcase	6.1 gal (US)
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DEF Tank	6.9 gal (US)
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Differential - Final Drives - Front	15.1 gal (US)
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Differential - Final Drives - Rear	15.1 gal (US)
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Fuel Tank	80.1 gal (US)
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Hydraulic Tank	30.1 gal (US)
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Transmission	15.5 gal (US)
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Hydraulic System

Implement System - Maximum Operating Pressure	4496 psi
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Implement System - Maximum Pump Output at 2,250 rpm	99 gal/min
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Hydraulic Cycle Time - Total	10.1 seconds
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Dimensions

Note	All dimensions are approximate and based on machine equipped with 5.4 m ³ (7.1 yd ³) general purpose bucket with BOCE and Bridgestone 29.5R25 VSNT L4 radial tires.
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Dimensions - High Lift

Centerline of Rear Axle to Edge of Counterweight	8.1 ft
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Centerline of Rear Axle to Hitch	5.1 ft
Ground Clearance	1.4 ft
Height - Top of Exhaust Pipe	11.8 ft
Height - Top of Hood	9.5 ft
Height - Top of ROPS	11.1 ft
Hinge Pin Height at Carry	2.6 ft
Hinge Pin Height at Maximum Lift	15.9 ft
Lift Arm Clearance at Maximum Lift	13.8 ft
Overall Length - Without Bucket	26.6 ft
Tread Width	7.3 ft
Wheel Base	11.8 ft
Rack Back - Carry Height	49 degrees
Rack Back - Maximum Lift	71 degrees
Width over Tires (Loaded)	9.11 ft
Rack Back at Ground	37 degrees

Dimensions - Standard Lift

Centerline of Rear Axle to Edge of Counterweight	7.7 ft
Centerline of Rear Axle to Hitch	5.1 ft
Ground Clearance	424 mm

Height - Top of Exhaust Pipe	3531 mm
Height - Top of Hood	2850 mm
Height - Top of ROPS	3593 mm
Hinge Pin Height at Carry	2 ft
Hinge Pin Height at Maximum Lift	4245 mm
Lift Arm Clearance at Maximum Lift	3687 mm
Overall Length - Without Bucket	7399 mm
Tread Width	7.3 ft
Wheel Base	3550 mm
Rack Back - Carry Height	50 degrees
Width over Tires (Loaded)	9.11 ft
Rack Back - Maximum Lift	62 degrees
Rack Back at Ground	39 degrees

Bucket Capacities

Bucket Range	2.8-11.9 m ³ 3.75-15.5 yd ³
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966 Standard Equipment

Operator Environment

Cab, pressurized, sound suppression
 EH implement controls, parking brake
 Steering, joystick
 Seat, cloth, air suspension
 Touchscreen display
 Visibility: mirrors, rear-vision camera
 Air conditioner, heater, defroster (auto temp, fan)
 Sun visor, front, retractable
 Sun visor, rear, retractable

Window cleaning platform, front
Window, front, laminated

ON-BOARD TECHNOLOGIES

Cat Payload scale
Autodig with Auto Set Tires
Operator ID & machine security
Application Profiles
Job Aids
Controls Help and eOMM

POWER TRAIN

Cat C9.3B engine
Electric fuel priming pump
Fuel-water separator and secondary fuel filter
Engine, air precleaner
Axles, front differential lock
Transmission, planetary, automatic powershift
Torque converter with lock-up
Service brakes, hydraulic, fully enclosed wet disc, wear indicators
Integrated Braking System (IBS)
Park brake, caliper on front axles, spring applied-pressure released

HYDRAULICS

Implement system, load sensing with variable displacement piston pump
Steering system, load sensing with dedicated variable displacement piston pump
Ride control, dual accumulators
Oil sampling valves, Cat XT™ hoses

ELECTRICAL

Starting and charging system, 24V
Starter, electric, heavy duty
Lights: halogen, 4 work lights, 2 front roading lights with turn signals, 2 rearvision lights

MONITORING SYSTEM

Front dash with analog gauges, LCD display, and warning lights
Primary touchscreen monitor (Cat Payload, quad screens, machine settings & messages)

LINKAGE

Standard lift, Z-bar
Kickouts: lift and tilt

966 Optional Equipment

Operator Environment

Door, remote opening system
HMU steering wheel
Entertainment radio (FM, AM, USB, BT)
Entertainment radio (DAB+)
CB radio ready
Seat, suede/cloth, air suspension, heated
Seat, leather/cloth, air suspension, heated/ cooled

Multiview (360◊) vision system
Cat Detect rear radar system
Dedicated rearview screen
Mirrors, heated
Full cab window guard

ON-BOARD TECHNOLOGIES

Cat Advanced Payload
Cat Payload Printer

POWER TRAIN

Turbine, air precleaner
Radiator, high debris
Cooling fan, reversible
Axles, auto differential locks front and rear
Axles, ecology drains, AOC ready, extreme temperature seals
Axles, oil cooler

HYDRAULICS

3rd and 4th auxiliary functions with ride control
Quick coupler control

ELECTRICAL

Cold start, 120V or 240V
Lights: LED
Warning beacon

MONITORING SYSTEM

Reversing strobe lights

LINKAGE

High lift, Z-bar

ADDITIONAL EQUIPMENT

Cat Autolube system
Fenders, extensions or roading
Guards: power train, crankcase, cab, cylinders, rear
Biodegradable hydraulic oil
High-speed oil change system
Rear cab access
Toolbox
Wheel chocks
Secondary steering system, electrical

SPECIAL CONFIGURATIONS

Aggregate handler
Waste and industrial
Forestry
Tunnelling
Corrosion resistant